DETAILED ACTION

This action is in response to Applicant's amendment filed on February 17, 2010. **Claims 11-13, 15, and 16** are still pending in the present application. **This action is made FINAL**.

Response to Arguments

Applicant's arguments filed February 17, 2007 have been fully considered but they are not persuasive.

The argument features a method for high-speed broadband two-way communication in which, among other things, the first and second signals both from a mobile communications terminal and from a base station are transmitted using the same frequency and via the same transponder in a satellite.

The examiner respectfully disagrees with the applicant's statement and asserts that Bengeult et al. discloses a transmission of data from the aircraft to the ground station/base station (par. 45, lines 1-5), the ground station/base station in turn provides the requested data (par. 45, lines 5-7). This two-way communication obviously takes place on the same frequency and transponder. Dillon was introduced to explicitly/clearly show that the two way transmission involving two signals, one from the aircraft and the other from the ground station/base station, are on the same/single frequency.

In view of the above, the rejection using Bengeult and Dillon is maintained as repeated below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 11-13, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bengeult et al. (U.S. Patent Application Number: 2002/0087992)** in view of **Dillon (U.S. Patent Application Number: 2002/0108116), and further in view of Nobakht et al. (U.S. Patent Application Number: 2001/0054112).**

Consider **claim 11**; Bengeult discloses a method of high-speed broadband two-way communication for a mobile platform (par. 45), the method comprising: transmitting a first signal (return link) from a mobile communications terminal mounted in a vehicle (aircraft) to communicate with a base station (ground station) via a first antenna at the mobile communications terminal and a satellite (par. 32; 41-43, line 4); and transmitting a second signal (forward link) controlled by the base station (ground station) from the base station to communicate with the mobile communications terminal via the satellite and the first antenna at the mobile communications terminal (par. 34; 35, lines 1-12; par. 36), wherein the second signal (forward link) is controlled by the base station (ground station) in response to a data request contained in the first signal (par. 34; 35, lines 1-12; par. 36) , the first and second signal are transmitted on a frequency and via a same transponder in the satellite (par. 35, lines 1-12), the second signal enables broadband, two-way communication (par. 45) with one or more individual data terminal devices in the vehicle (par. 32 and 36).

Bengeult discloses the claimed invention except: clearly stating that the first and second signals are transmitted on a same frequency.

In an analogous art Dillon discloses that the first and second signals are transmitted on a same frequency (par. 15, lines 11-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Bengeult by including a satellite that transmits multiple signals on a same frequency, as taught by Dillon, for the purpose of efficiently distributing satellite broadcast data transmissions dynamically among a plurality of communication channels to enhance broadcast efficiency.

Bengeult and Dillon disclose the claimed invention except: the second signal uses a signaling rate in a range from 512 kbps and 3.5Mbps.

In an analogous art Nobakht discloses that the second signal uses a signaling rate in a range from 512 kbps and 3.5Mbps (par. 98).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Bengeult and Dillon by including a signaling rate in a range from 512 kbps and 3.5Mbps, as taught by Nobakht, for the purpose of providing suitable services that require a certain data rate.

Consider **claim 12**; Bengeult discloses transmitting the first signal and transmitting the second signal comprise transmitting the first and second signals at different times (the return and forward links are not transmitted at the same time) (par. 32 and 36).

Consider **claim 13**; Bengeult discloses generating, at the base station (ground station), the second signal in response to the first signal (par. 32 and 36).

Consider **claim 15**; Bengeult discloses generating, in the mobile communications terminal, the first signal in response to a data communication request from the one or more individual data terminal devices in the vehicle (aircraft) (par. 32), the one or more individual data terminal devices being in two-way communication with the mobile communications terminal (bi-directional communication between a user and the server in the aircraft) (par. 32).

Consider **claim 16**; Bengeult discloses that the vehicle is an aircraft (par. 32), and the mobile communication terminal and the first antenna are compatible with the size, weight and power constraints of the aircraft (par. 33).

Conclusion

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday 7:30am to 4:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Joel Ajayi/

Examiner, Art Unit 2617

/LESTER KINCAID/

Supervisory Patent Examiner, Art Unit 2617